

Translation

PATENT COOPERATION TREATY

PCT/DE2003/001127



PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 5085 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DE2003/001127	International filing date (day/month/year) 04 April 2003 (04.04.2003)	Priority date (day/month/year) 04 April 2002 (04.04.2002)
International Patent Classification (IPC) or national classification and IPC B21D 39/03		
Applicant TOX PRESSOTECHNIK GMBH & CO. KG		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>5</u> sheets, including this cover sheet. <input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT). These annexes consist of a total of <u>1</u> sheets.
3. This report contains indications relating to the following items: I <input checked="" type="checkbox"/> Basis of the report II <input type="checkbox"/> Priority III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability IV <input type="checkbox"/> Lack of unity of invention V <input checked="" type="checkbox"/> Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement VI <input type="checkbox"/> Certain documents cited VII <input type="checkbox"/> Certain defects in the international application VIII <input type="checkbox"/> Certain observations on the international application

Date of submission of the demand 04 November 2003 (04.11.2003)	Date of completion of this report 12 July 2004 (12.07.2004)
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/DE2003/001127

I. Basis of the report

1. With regard to the elements of the international application:*

- ☐ the international application as originally filed
- ☒ the description:
pages 1-16, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☒ the claims:
pages 2-17, as originally filed
pages _____, as amended (together with any statement under Article 19
pages _____, filed with the demand
pages 1, filed with the letter of 28 June 2004 (28.06.2004)
- ☒ the drawings:
pages 1/2-2/2, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____
- ☐ the sequence listing part of the description:
pages _____, as originally filed
pages _____, filed with the demand
pages _____, filed with the letter of _____

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language _____ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/fig _____

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**

* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

** Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-4	YES
	Claims	5, 9, 11, 12	NO
Inventive step (IS)	Claims	1-4	YES
	Claims	5-17	NO
Industrial applicability (IA)	Claims	1-17	YES
	Claims		NO

2. Citations and explanations

Claims 1 to 4

Claim 1 relates to a method for clinch joining components, such as plate materials, as known from the document GB-A-2 069 394, which is cited in the description and forms the preamble of claim 1.

The subject matter of claim 1 differs from that known prior art by features (e) and (f) of its characterizing portion.

These features are not derivable directly and unambiguously from the available prior art, for the following reasons:

EP-A-0 720 695 (D1) shows, in contrast to claim 1, a method for clinch joining wherein the plate is severed. In addition, and in contrast to feature (f) of claim 1, the flexible wall sections can be moved on a surface which does not merge uninterruptedly into the base surface.

In DE-A-198 43 834 (D2) and EP-A-1 183 130 (D3), the plate is not displaced against the force of elastically flexible wall sections, because the levers (11 and 22') are not spring loaded. And as in the case of D1, feature (f) of the characterizing portion of claim 1 is also not disclosed.

Consequently, the subject matter of claim 1 complies with the requirements of PCT Article 33(2) and (3) with regard to novelty and inventive step.

Dependent claims 2 to 4 concern advantageous embodiments of the subject matter of claim 1 and therefore likewise comply with the requirements of PCT Article 33(2) and (3).

Claims 5 to 17

Document D1 discloses (cf. figures 2 and 3) a tool having a punch (13) and a die (15) for clinch joining components, comprising at least one plate (1), with a working opening in a multipart die (15), a plurality of wall sections (24) of the die (15) which are radially disposed around the working opening and flexed outwards during the clinching operation, a base surface (20) of the die (15) which is arranged opposite the end face of the punch (13) and axially delimits the working opening. Said tool is arranged on a base part (18), and a plurality of casing sections (figure 3) are provided as fastening parts inflexibly in one piece with the base part (18) on the circumference of the working opening between the wall sections (24), said casing sections serving to radially guide the flexible wall sections (24).

Consequently, the subject matter of claim 5 does not comply with the requirements of PCT Article 33(2) with regard to novelty.

Having regard to the cited prior art, dependent claims 6 to 17 do not define any additional features which, in combination with the features of any claim to which they refer, can meet the PCT requirements for novelty (claims 9, 11 and 12) or inventive step (claims 6 to 8, 10 and 13 to 17).

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The subjects of claims 1 to 17 are undoubtedly industrially applicable.